#### Baseline Scenario

Prepared for: Envision Utah

Quality Growth Efficiency Tools (QGET)
Technical Committee

**September 17, 1997** 

#### Contributors

- 40 entities have provided direct input and analys
- Another 100 entities have been indirectly involve
- Major contributors include:
  - Counties and cities
  - Mountainland Association of Government
  - Wasatch Front Regional Council
  - Automated Geographic Reference Center
  - Utah Division of Air Quality
  - Utah Division of Water Resources/Quality
  - Utah Department of Transportation
  - Utah Transit Authority
  - Utah Department of Community and Economic Developm
  - Governor's Office of Planning and Budget
  - P Local Water and Sewer Districts

#### Limitations

- Scope strictly limited to the subject areas of transportation, air quality, water, sewer, and lan use
- Work in progress and will be revised as better information becomes available
- Inclusion or exclusion of specific projects and events does not mean they will or will not happen. All projects will require funding and environmental studies in order to come to fruition.
- Presently, state and local governments see their role as responding to growth and the needs it creates to build the infrastructure of the future

#### Study Area

Pincludes a 10-county area referred to as the **Greater Wasatch Area.** The central portion of this area represents the "commutershed" and stretches from **Brigham City to Nephi** and Tooele to Heber



### Baseline 2020 **Demographic and Economic Projections** Air **Transportation** Water Quality **Land Use Fiscal Impacts**

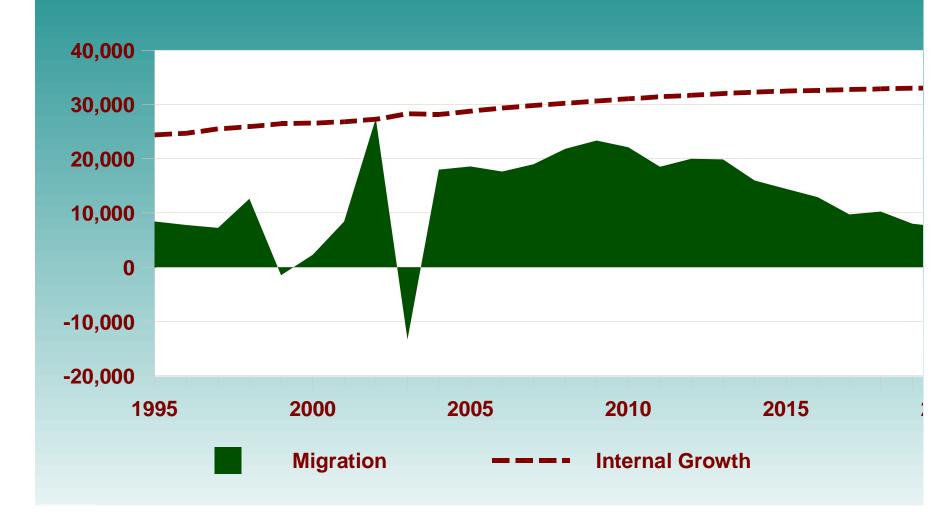
### Demographic and Economic Issues and Findings

- Population projected to increase from 1.62 million (slightly smaller than the Portland metro area) to 2.70 million (simila to the current size of the San Diego metro area)
- Current and projected rates of population growth are twice the national average, but similar to many other Intermounta states
- The primary explanations for rapid population growth are high birth rates and low mortality rates. Utah's fertility rate 24% higher than the U.S. average. In 1995, for instance, Utah's higher birth rate alone resulted in 6,500 more people in the Greater Wasatch Area.
- ! Two-thirds of the population growth originates from resident's own children and grandchildren

# Demographic and Economic Issues and Findings

- Population growth will average approximately 43,000 new residents a year, an annual population increase roughly the current size of Bountiful
- Homes and apartments for approximately 17,400 new households each year will need to be provided
- Attempts to limit in-migration by restricting economic development opportunities are likely to negatively impact economic prospects for residents as well
- Some economic activity that would have occurred afte the 2002 Winter Olympic Games is projected to be accelerated to the years prior to and during the games

#### Migration and Natural Increase



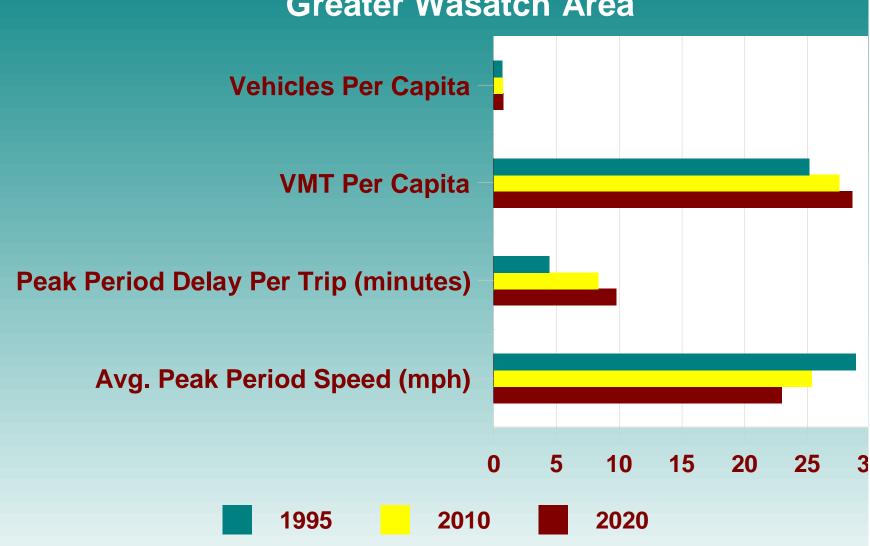
# Transportation Issues and Findings

- Initially, drive alone travel comprises 77% of total trips, followed by 14% with a passenger, 3% by bus, and 6% other
- Investment in light rail will provide mobility benefits and will help increase accessibility, air quality, and congestion reduction. However, much of the current and projected mas transit system is based on buses which operate in the same congestion as the automobile.
- Current transit revenues will not support expansion beyond the already planned development of the North-South TRAX and comparable bus service to what exists today
- Total transportation infrastructure development is projected to amount to \$9.7 billion between 1995 and 2020. This equates to \$3,600 per person and \$10,121 per household.

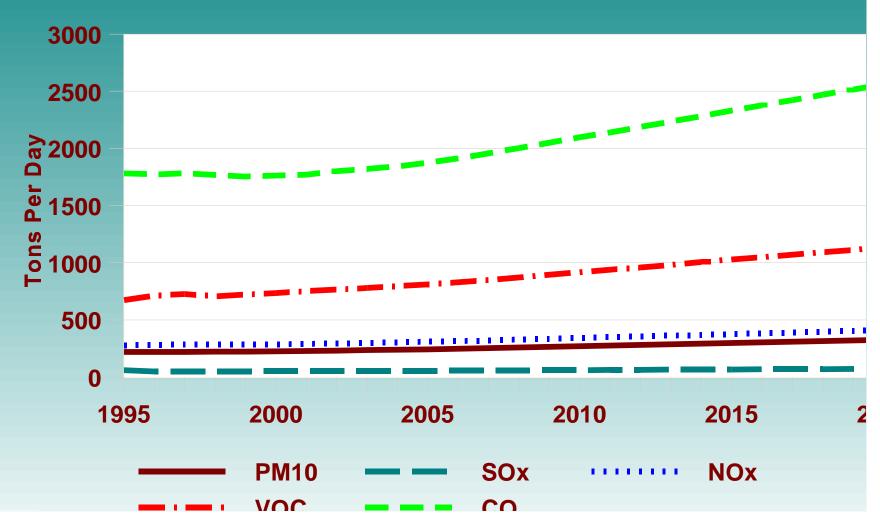
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#### Transportation Characteristics



#### Projected Air Quality Emissions



#### Water Supply and Demand

- Water is not a constraint to growth through 2020
- New sources of supply include additional groundwater, expansion of treatment plants, irrigation conversion, treatment of Utah Lake/Jordan River water, and Bear River development
- Per capita use is projected to decline from 319 culinary gallons per day in 1995 to 279 in 2020. Per capita use will still be higher than both the Intermountain state and U.S. average
- Real water rates are projected to increase by 50% from 1995 to 202
- ! The cost of new water development is the most significant water issue. Costs are high because of an aging delivery system, expensive environmental and health standards, less federal assistance, and the costliness of the next new sources of supply.
- Water development is projected to cost over \$3.2 billion between 1995 and 2020. This equates to approximately \$1,200 per person and \$3,300 per household.

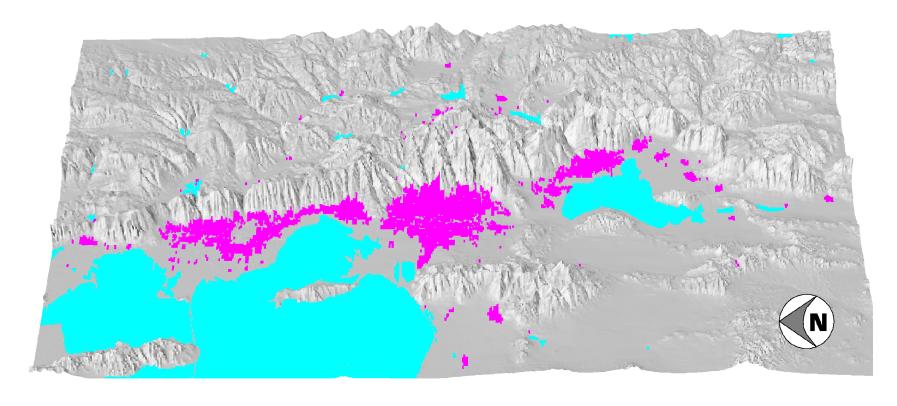
#### Water Supply and Demand



## Land Use Issues and Findings

- The urban portion of the Greater Wasatch Area is projected to nearly double from 320 square miles in 1995 to 590 square miles in 2020
- Densities are also projected to increase from 7 persons per square mile in 1995 to 119 per square mile in 2020
- Urban expansion is projected to result in the loss of nearly 66,000 acres of irrigated agricultural lands (a 13% reduction)

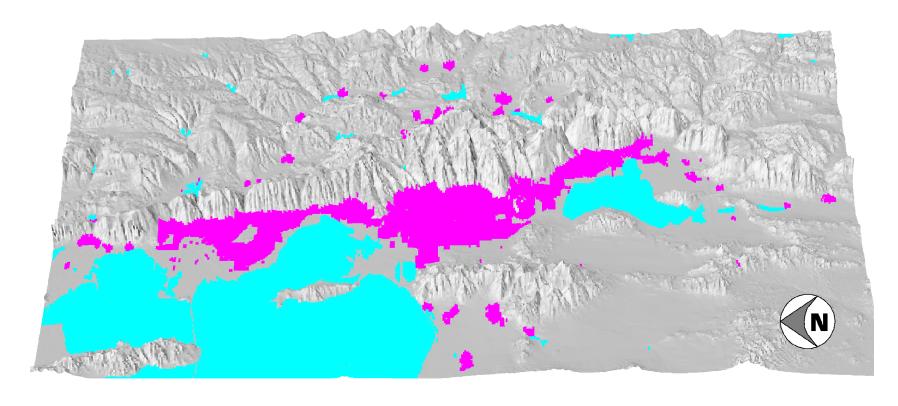
#### Potential Urban Area



Year: 1995

Population: 1.6 Million

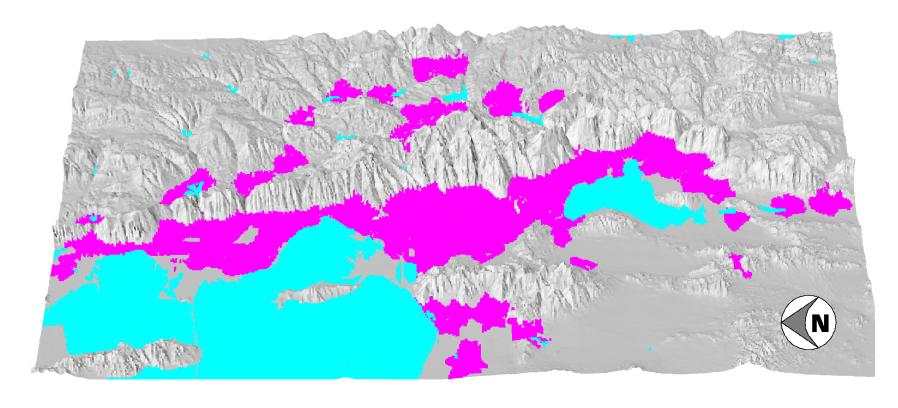
#### Potential Urban Area



Year: 2020

Population: 2.7 Million

#### Potential Urban Area



Year: 2050

Population: 5 Million

#### **Baseline 2050 Issues**

- The most critical issue is the presence of significant constrair and quality of life issues
  - Air Quality
  - Water Supply
  - Land availability
  - Costs
- Projected population of 5 million is the approximate size of Philadelphia today
- The urban land area is projected to quadruple from 320 square miles in 1995 to 1,350 square miles in 2050
- More than half (273,000 acres) of all irrigated agricultural land the Greater Wasatch Area is projected to be converted to urba use
- Residents cannot wait until 2020 to consider how their actions will impact the area in 2050